HO O C17H35
$$+$$
 O2N O C1 II $+$ O2N O C1 $+$ O C1 $+$ O2N O C1 $+$ O C17H35 $+$ O C17H35

Fig. 1

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

Fig. 2A

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

Fig. 2B

Fig. 2C

Fig. 2D

$$\bigcap_{NH_2}^{O} \bigcap_{R}^{R}$$
 Fig. 3B

Fig. 4

$$\begin{array}{c} R'-SH \\ \longrightarrow \\ M \\ \text{MPEG}-O \\ \longrightarrow \\ M \\ \text{R} \\ \text{(e.g., R=H, CH_3, C_2H_5)} \\ \longrightarrow \\ M \\ \text{R} \\ \end{array}$$

Fig. 5

mPEG – OH

1. CI
$$\stackrel{\circ}{\longrightarrow}$$
 O

2. 1-amino-2-propanol or -2-butanol

3. CH₃SO₂CI / TEA
4. Tr-SH / NaH
5. CH₃OCOSCI

mPEG – OH

 $\stackrel{\circ}{\longrightarrow}$ O
 $\stackrel{\circ}{\longrightarrow$

Fig. 6A

Fig. 6B

Fig. 7

Fig. 8A

$$\begin{array}{c} \text{mPEG-O} \\ \text{M} \\ \text{CH}_{3} \\ \text{Cysteine / glutathione} \\ \text{(any thiol, R-SH)} \\ \text{M} \\ \text{O} \\ \text{C}_{17}\text{H}_{35} \\ \text{M} \\ \text{C}_{17}\text{H}_{35} \\ \text{C}$$

Fig. 8B